

8:10–9:40 Saturday Concurrent Sessions - Morning I					
	Room A	Room B	Room C	Room D	Room E
	EREN: A Collaborative Networked Approach to Research and Teaching with Undergraduates I	Full Life-cycle Ecology	Botany	Marine Impact on Coastal Ecosystems	On-farm Habitats: Agronomic Beneficials and Biodiversity Conservation I
Moderator	Sara Scanga	Jason Hill	Laney Widener	Gaytha Langlois	Conrad Vispo
8:10–8:15	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview
8:15–8:35	Danielle Garneau Ecological Research as Education Works: EREN	Michael Hallworth Tracking Dragons: Stable Isotopes Reveal the Annual Cycle of a Long-distance Migratory Insect	Jinyan Guo Stigma, Pollen Tube Transmitting Track, and Epidermal Micromorphology of the Style of <i>Sarracenia purpurea</i>	Gaytha Langlois Microbial Responses to Pollutants in Coastal Sediments	Conrad Vispo Applied Farmscape Ecology: Managing On-farm Habitats for Beneficials and Nature Conservation
8:35–8:55	Mary Beth Kolozsary Using a Multi-site Collaborative Network to Study Large-scale Spatial Patterns in Freshwater Turtles	Jason Hill Migratory Patterns and Connectivity of Grasshopper Sparrows	Jinyan Guo Developmental Sequence of the Flattened and Broadened Style of <i>Sarracenia purpurea</i>	Gaytha Langlois Presence of Metals in the Marine Macroalgae <i>Codium fragile</i> and <i>Chondrus crispus</i> : Establishing Baseline Data for the Bryant University Macroalgae Remediation Project	Claudia Knab-Vispo Creating Habitat: Establishment and Monitoring of On-farm Native Wildflower Meadows
8:55–9:15	Mark Lesser Tracking Forest Change Using the Permanent Forest Plot Project	Rodger Gwiazdowski Repopulating the Endangered Puritan Tiger Beetle in the Connecticut River	Lindsey Pett Aquatic Ecosystem Stoichiometry in Response to Nutrient Deposition, Using the Model System <i>Sarracenia purpurea</i>	Michael Rizzo Ocean Sunfish Strandings on the Shores of New England	Dylan Cipkowski Beneficial Insect-Wildflower Associations in Upstate New York: Farm Management Implications
9:15–9:35	Aimee Phillippi Is Common Milkweed (<i>Asclepias syriaca</i>) Locally Adapted?	Susi von Oettingen Contrasting Life History Strategies of Two Freshwater Mussel Species of <i>Alasmidonta</i>	Matt Peters Toward a Flora of Uapishka – Les Monts Groulx, Quebeca	Katelynn Howard & John Stachelhaus Land Cover Change and Forest Loss in the Woonasquatucket Watershed in Northern Rhode Island	Erin Allen Butterflies as Charismatic Indicators of On-farm Habitat Quality
9:35–9:40	Q & A	Q & A	Q & A	Q & A	Q & A

10:30–12:00 Saturday Concurrent Sessions - Morning II					
	Room A	Room B	Room C	Room D	Room E
	EREN II	Population Ecology	Phenology and Climate Change I: Long-term Trends	Turtle Ecology and Conservation I	On-farm Habitats II
Moderator	Mary Beth Koloszvary	Caitlin Fisher-Reid	Richard Primack	Brian Bastarache	Conrad Vispo
10:30–10:35	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview
10:35–10:55	Timothy McCay Geographic Pattern in Earthworm Assemblages of the Northeast and Midwest	George Kraemer Understanding Boom–Bust Cycles of Invaders Can Require Long-term Data Sets and Population Structure Monitoring	Sarah Bois Phenological Response to Earlier Spring: Opportunities and Challenges in a Changing Climate	Russell Burke Visual and Olfactory Cues Raccoons Use to Find Diamondback Terrapin Nests: Do Raccoons Learn?	Kendrick Fowler Ant Assemblages in Vegetable Crops and Crop-Adjacent Habitats in the Hudson Valley, New York
10:55–11:15	Anna Aguilera Identifying Patterns for Garlic Mustard Invasion Success	Nicholas Dorian Estimating Dispersal of the Endangered Karner Blue Butterfly (<i>Lycaeides melissa samuelis</i>)	Megan Napoli Phenological Shifts in Southeastern NY: Understanding the Local Effects of Climate Change through Analysis of a Unique Long-term Dataset	Danielle Marston Monitoring the Impact of Coastal Erosion on the Nesting Habitats of <i>Malaclemys terrapin</i> (Northern Diamondback Terrapin) in Marion, Mattapoissett, and Wareham, MA	Carmen Greenwood Invertebrate Roles in Ecosystem Function: Life Underground
11:15–11:35	Sara Scanga Macroscale Ecology in the Classroom: An EREN Partnership Using NEON Data	Jill Fleming Sparcnet: Collaborative Range-wide Monitoring of the Red-Backed Salamander (<i>Plethodon cinereus</i>)	Sarah Rumsey Phenological Changes in Avian Migration Revealed by Local Long-Term Data From Northeast Connecticut	Barbara Brennessel Diamondback Terrapin Utilization of Wellfleet’s Herring River Estuary	Anne Bloomfield Are Birds Beneficial to Farming? Changing Attitudes, Conservation, and Research Needs in the Northeast
11:35–11:55	Kathleen LoGiudice How Can We Expand EREN’s Reach?	Maria Aliberti Lubertazzi A Tale of Two Urban Ponds—Seen Through the Lens of Emerging Dragonfly Populations	Lucille Zipf Impacts of Global Change on Reproductive Phenology and Success of Tree Swallows	George Bancroft A Population Assessment of <i>Malaclemys terrapin</i> (Northern Diamondback Terrapin) in the Lower Taunton River Watershed	Noah Perlut Community Farming for Grassland Birds: A Local Conservation Strategy
11:55–12:00	Q & A	Q & A	Q & A	Q & A	Q & A

1:30-2:40						Saturday Concurrent Sessions - Afternoon I				
		Room A	Room B	Room C	Room D	Room E				
		Pollination Ecology	The Spotted Lanternfly: An Emerging Pest	Phenology and Climate Change II: New Approaches and Insights	Turtle Ecology and Conservation II	On-farm Habitats III				
Moderator		Patricia Jones	Javier Marin	Morgan Tingley	Brian Bastarache	Conrad Vispo				
1:30-1:35		Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview				
1:35-1:55		Sarah Lawson Effects of Pollen Nutrition on Development in the Small Carpenter Bee	Javier Marin Spotted Lanternfly: The Latest Threat to the Commonwealth	Kerissa Battle & Anna Duhon Two Centuries of Phenological Change in NY State: A Historic-Modern Citizen Science Network Story	Sidney Anderson Population Study of Eastern Painted Turtles (<i>Chrysemys picta</i>) on Two Ponds In Acadia National Park	Erik Kiviat Turtles and Agriculture: A Review				
1:55-2:15		Patricia Jones Impacts of Alcohol in Floral Nectar on Foraging Behavior in Bumblebees	Richard Gardner The Spotted Lanternfly: Observations and Thoughts from the Frontline in Berks County, PA	Tara Miller Fruiting Phenology Investigated with Thoreau's Observations and Herbarium Specimens	Brian Bastarache 10 years and 1000 Turtles: Lessons about Head-starting as a Conservation Tool	Jerry Jenkins Farm Abandonment: a Bryophyte View				
2:15-2:35		Rachel Noone Effect of Diurnal and Nocturnal Pollination on Fruit Abundance and Quality of Lowbush Blueberry (<i>Vaccinium angustifolium</i>) Patches on Kent Island	John Rogan Predicting the Spread of Spotted Lanternfly (<i>Lycorma delicatula</i>) in Central Massachusetts	Richard Primack Was Thoreau a Good Naturalist?	Miranda Figueras Consumption and Assimilation Patterns of the Eastern Box Turtle: A Diet Generalist?	Jean-Paul Courtens On-farm Habitats: An Organic Farmer's Perspective				
2:35-2:40		Q & A	Q & A	Q & A	Q & A	Q & A				

3:20–5:30 Saturday Concurrent Sessions - Afternoon II					
	Room A	Room B	Room C	Room D	Room E
	Roadside and Interior Forest Ecology	Human Impacts on Wildlife	Natural History of Sedges	Public Participation in Rare Species Conservation	Arthropod Ecology
Moderator	Jack Tessier & Christopher Martin	Alllyson Jackson	Jerry Jenkins	Bryan Windmiller	Daniel Shustack
3:20–3:25	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview
3:25–3:45	Richard Stafursky Species' Forest Model for the Return of the Natural Landscape	Aaron Grade Patterns of Mammal Diversity and Abundance Across a Suburban Gradient	Lisa Standley The Diversity, Evolution and Ecology of Carex: a Personal Perspective	Jonathan Atwood Using Citizen Science Data to Assess Eastern Meadowlark Status in Massachusetts	Paul Siskind Controlling Lily Leaf Beetle: An Integrated Pest Management Approach
3:45–4:05	Jack Tessier Minimal Impact of a Long-Distance Hiking Trail on the Plant Community in the Adirondacks	Will Maynard Distribution of Black Bears in the Exurbs and Suburbs of southern New York and Connecticut	Robert Popp Habitat for the Federally Endangered Northeast Bulrush: Searching in All the Wrong Places	Cara McElroy HATCH: Partnering with Local Institutions to Bolster the Threatened Blanding's Turtle	McKenzie Wybron Habitat Selection and Dispersal of the Northern Barrens Tiger Beetle (<i>Cicindela patruela</i>) in the Hudson Valley, New York
4:05–4:25	Thomas Worthley Assessing Roadside Oak Mortality in Eastern Connecticut Due to Gypsy Moth Defoliation and Other Factors	Stephen Kovari Where Coyotes and Red Fox Live: Determining Occupancy and Activity Patterns on a Suburban College Campus Using Motion Activated Camera Traps	Robert Wernerehl Tracking Rare Sedges in Massachusetts	Laura Heady Engaging Volunteers to Raise Awareness and Reduce Mortality of Pool-Breeding Amphibians	Jennifer Apple Natural History of a Non-Native Ant-Mimicking Spider in Western New York
4:25–5:45	Christopher Martin Identifying Trees within State Parks and Forests that Pose High Risk to the Public and Infrastructure Utilizing ESRI's 123 Survey Tool	Lauren Nolfo-Clements Recovery Disparities in Island White-Footed Mouse Populations Following a Historically Snowy Winter	Brett Engstrom Celebrating Our Sedges Out-of-Season: Vegetative Characters and Evergreenness	Laney Widener The New England Plant Conservation Volunteer Program	Peter Burn Abundance of Six Moth Species in Carlisle, MA, from 2012-2018

4:45–5:05	Jeffrey Ward Stormwise - Integrating Forest and Roadside Management Objectives to Create Storm Resilient Forests	Brandi Van Roo Potential Impacts of Solar Arrays on Wildlife Communities	Matt Peters Alpine Sedges in the Northeastern Flora: Their Identity, Status, and Natural History	Jay Cordeiro Post-release Monitoring of a Captive Bred Spadefoot Toad, <i>Scaphiopus holbrookii</i> , Population in Restored Wetlands on Cape Cod, MA	Daniel Shustack Secondary "Market" for Bird Feathers: What Happens to Feathers After Birds Shed Them?
5:05–5:25	Q & A	Katherine Straley Parental Behaviors Mediate the Effects of Bird Blow Fly Parasitism on Nestlings in Suburban Forests	Jerry Jenkins A Pattern Language for Sedge Ecology	Q & A	Q & A
5:25–5:30		Q & A	Q & A		

7:30–10pm	ROOM A — American Society for Amateur Archaeology (ASAA) Symposium on
	MEGA-FAUNA OF LATE PLEISTOCENE EASTERN NORTH AMERICA: HUMAN INTERACTIONS
	<i>A Site Where a Butchered Mastodon was Consumed and Its Skeleton Transformed into Artifacts</i> by Richard M. Gramly
	<i>Lighting, Heating, and Cooking during the Late Pleistocene: Upper Palaeolithic Lamps in the Old and New Worlds</i> by Richard M. Gramly and Dennis J. Vesper
	<i>Discovery of Portable Art from the Clovis Zone, Hiscock Site, NY</i> by James B. Harrod
	<i>Cultural Insights Derived from Iroquois and Northeastern Oral Traditions of Ancient "Monsters"</i> by Russell Judkins
	<i>The Coats–Hines Site, Tennessee, and Mastodon B</i> by Richard M. Gramly, John Broster, and Chris Widga

The ASAA symposium is open to all who have registered for the Northeast Natural History Conference

8:10-9:40	Sunday Concurrent Sessions - Morning I				
	Room A	Room B	Room C	Room D	Room E
Moderator	Brian Bastarache	John Anderson	Kathleen Nolan	Carol Henger	Timothy McCay
8:10-8:15	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview
8:15-8:35	Brett Thelen Amphibian Road Closures: Lessons Learned From a Pilot Season of "Big Night Detours" in Keene, NH	John Anderson Changes in Breeding and Loafing Seabird Populations in Eastern Maine: The View From Great Duck	Kathleen Nolan Networking with YES! Youth Educational Seining Groups	Elizabeth Heppenheimer High Genomic Diversity and Candidate Genes Under Selection Associated with Range Expansion in Eastern Coyote (<i>Canis latrans</i>) Populations	Damnait McHugh Phylogeographic Analyses of Three Asian Earthworm Species Co-invading North America
8:35-8:55	Zac Cota Using Citizen Science to Assess Amphibian Road Crossing Sites in Vermont	Jenna Schlener Individual Variation in Foraging Behavior by Gulls in Eastern Maine	Michelle Kraczkowski Experiential Learning through Immersive Observations of a Campus Landscape	Alexandra DeCandia Genetics of Urban Coyote Colonization: Neutral and Adaptive Variation in New York City's Newest Residents	Josef Gorres Invasive Jumping Worms: Cocoons, Climate Change and Expansion at the Northern Limit of their Range
8:55-9:15	Jasper Leavitt Impacts of Cannibalism on an All-Female Lineage of Salamanders	Noah Perlut Dispersal Distance by Sub-adult Herring Gulls Increases with Latitude Across the Gulf of Maine	Jameson Chace A Civically Engaged Conservation Biology Course Increased Student Investment in Learning	Tatyana Graham Are Coyotes "Natural"? Perceptions of Coyotes in New York City	Rebecca Pinder Native and European Earthworm Assemblages along Riparian Zones in Eastern New York: 10 Years Later
9:15-9:35	Michael Graziano Amphibians and Vernal Pools: Seeing the Forest for the Trees	Jeff Kolodzinski Jailbirds: The History and Future of Herring Gulls on Rikers Island in New York City	Justine Weber Rediscovering Our Species Sense: Developing Natural History Appreciation and Skillsets in Undergraduate Students	Mark Weckel <i>n</i> of 1: Spatial Ecology of an Eastern Coyote Along the East Bronx Waterfront	Timothy McCay Native Earthworms and the Possible Pre-Columbian Earthworm Landscape of the Northeast
9:35-9:40	Q & A	Q & A	Q & A	Q & A	Q & A

10:30-12:00	Sunday Concurrent Sessions - Morning II				
	Room A	Room B	Room C	Room D	Room E
	Amphibian Ecology and Conservation II	Avian Biology and Conservation	Macroinvertebrates	Rare Plant Monitoring: What are We Measuring and to What End?	Effects of Exotic Earthworms
Moderator	Brian Bastarache	Chad Seewagen	Jay Cordeiro	Robert Popp	Annise Dobson
10:30-10:35	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview
10:35-10:55	Greg Gerritt Fowler's Toads and the Rainwater pool: A Video Study	Justin Clarke The Northern Waterthrush: Analyzing Distribution and Abundance of a Secretive Songbird in PA	Erik L'Heureux Generalist or Specialist: What Habitats are Occupied by the Invasive Slug <i>Arion fuscus</i> ?	Steve Young The Monitoring of Seabeach Amaranth (<i>Amaranthus pumilus</i>) on Long Island	James Fischer Exploring the Relationships between <i>Ixodes scapularis</i> and Introduced Earthworms in Northern Forests
10:55-11:15	Andis Arietta Feeling the Squeeze: Late-season Advancement and Early-season Delays in the Phenology of a Common Amphibian	Chad Seewagen Effects of Japanese Barberry on the Prey Base and Physiological Condition of Breeding Male Ovenbirds	Hinatea Ariey Diet of an Exotic Invasive Slug Species Through Genetic Analysis	Robert Wernerehl Sandplain <i>Gerardia</i> : Federally Listed Plant Monitoring in Massachusetts	Robert Buchkowski Earthworms Work Alone: The Combined Impact of Non-native Earthworms and Native Herbivores on Plants and Nutrient Cycling in Connecticut Old-fields
11:15-11:35	William Cranier Analysis of Cutaneous and Environmental Microbial Communities of Pre- and Post-Metamorphic North American Frogs	Mariamar Gutierrez Influence of En Route Weather Over the Gulf of Mexico on the Lean Mass and Continued Migration of Birds of the Northeast	Weston Strubert Effects of Riparian Plant Invasions on Stream Macroinvertebrate Communities	Robert Popp Twenty-five Plus Years of Monitoring and Management of the Federally Endangered Jesup's Milk-vetch	Annise Dobson Impacts of Invasive Earthworms on Forest Plants
11:35-11:55	Scott Smyers Larval Development Variation Exhibited by Wood Frogs from Across New England Including Mount Washington, NH	Debra Kriensky Tracking Semipalmated Sandpiper Migration from Jamaica Bay, NY	Alyssa Gleichsner Risky Business: Do Infected <i>Daphnia</i> Have a Higher Predation Risk?	Arthur Gilman Monitoring Vermont's Largest Population of Autumn Coralroot	Q & A
11:55-12:00	Q & A	Q & A	Q & A	Q & A	

Sunday Afternoon I					
1:45-3:10	Plenary Session - Room TBD Youth at the Helm of Building Community Climate Empowerment Jen Kretser , Director of Climate Initiatives, The Wild Center Witter Swanson , Student snf Youth Climate Advisory Board, The Wild Center Brittany Gutermuth , Climate Educator, Massachusetts Audubon Society				
	<p>The term climate change often prompts feelings of diminished hope and futility regarding rising temperatures and sea levels, drought, wildfires, invasive species, diminishing snow pack, erratic storms and changing precipitation patterns, and a deep political divide. These feelings are legitimate—climate change is considered to be the greatest threat to humanity. However, optimism, determination, and resilience do exist among young people, and they are igniting a climate movement. For today’s youth, the status quo is unacceptable, and many feel we need to transition rapidly to a low-carbon economy. For the last 10 years, thousands of students have learned about climate change through a unique, youth-driven climate-education program in the Adirondack Park of upstate New York: the Adirondack Youth Climate Program. In turn, they are sharing that program model around the world. The program’s student leaders are part of a worldwide movement whose purpose is to engage and empower youth on climate change. Join the speakers as they share a unique approach to partnering with young people to act on climate change in their communities.</p>				
3:50-6:00					
Sunday Concurrent Sessions - Afternoon II					
	Room A	Room B	Room C	Room D	Room E
	Snake Ecology and Conservation	Human Impacts on Birds	Innovative Tools for Conservation: More Bang for the Buck	Orchids of the Northeast: Taxonomy, Distribution, and Population Status	The Ecology of Mycorrhizal Plants and Fungi
Moderator	Brian Bastarache	Jessie Knowlton	Robert Wernerehl	Tierney Rosenstock	Thomas Horton
3:50-3:55	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview
3:55-4:15	Jonathan Adamski Quantifying the Effects of Habitat Disturbance on <i>Crotalus horridus</i> (Timber Rattlesnake) in Pennsylvania	Anneliese Malachi American Kestrel (<i>Falco sparverius</i>) Nest Box Occupancy and Success in Cranberry Bogs in Southeastern Massachusetts	Tulpen Hansen-Schwoebel Using ArcGIS to Map the Fruiting Phenology of Native and Invasive Species	Tierney Rosenstock Adirondack Orchid Survey: Species, Distribution, and Abundance	Thomas Horton Legacy of <i>Robinia pseudoacacia</i> (Black Locust) Invasion and use of Ectomycorrhizal Fungi to Restore <i>Pinus rigida</i> (Pitch Pine) in the Albany Pine Bush Preserve
4:15-4:35	Kathy Michell Techniques and Materials Used to Create an Effective Temporary Venomous Snake Exclusion Barrier	Teresa Trias Breeding Grassland Bird Presence in Southeastern Massachusetts	Steven Lamonde A Golden Opportunity: Novel GIS Applications for Rare Species Conservation	William Brumback Response of an <i>Isotria medeoloides</i> Population to Canopy Thinning	Claudia Victoroff Fruiting Response of Ectomycorrhizal Fungi to Nutrient Additions in Bartlett Experimental Forest, New Hampshire

4:35–4:55	Tom Tying The Snake that Loves People	Melissa Jernakoff Effects of Habitat and Diet on Mercury Exposure in Breeding Songbirds in Southeastern Massachusetts	Robert Wernerehl New Conservation Tools and Guidelines for Restoring Sandplain Grasslands in New England	Andrea Nurse <i>Cypripedium arietinum</i> : Rare Plant Conservation in a Changing Climate	Aimee Hudon Ectomycorrhizal Ecology of <i>Quercus ilicifolia</i> (Scrub Oak) in Fire-adapted Pine Barrens
4:55–5:15	Alan Richmond <i>Carphophis amoenus</i> (Eastern Wormsnake) in Massachusetts	Veronica Winter Mercury Contamination in Protected Areas: Comparing Riparian Songbird Concentrations Across Five US National Parks	Christa Reeves & Kristen Roth From Golf Course to Wildlife Refuge: Quantifying Restoration Efforts with Low-cost Sensor Technology Using Stream Discharge and Turbidity	Matthew Pace How Do You Solve a Problem Like <i>Spiranthes cernua</i> ?	Ryan Stephens Signaling from Below: Rodents Select for Deeper Fruiting Truffles with Stronger Volatile Emissions
5:15–5:35	Tigran Tadevosyan Movements, Home Ranges, and Seasonality in Habitat Use by Northern Copperhead in Massachusetts	Natasha Karniski Changing Precipitation Patterns and the Common Loon in the Adirondack Park, NY	Brittney Rogers Engaging Broader Audiences through the iMapInvasives Certified Trainers Network	Laney Widener Common Orchid Conservation Efforts in New England	Julian Koob A Truffle-finding Orchid: <i>Epipactis helleborine</i> 's Mycorrhizal Fungi and Their Role in the Orchid's Carbon Budget
5:35–5:55	Q & A	Allyson Jackson Spanning the (Ecosystem) Gap: Aquatic Invertebrates Subsidize Nutrients and Mercury to Riparian Songbirds	Brian Boom <i>Fraxinus</i> Diversity and Emerald Ash Borer: Delineating Species, Engaging Citizen Scientists	Q & A	Q & A
5:55–6:00		Q & A	Q & A		

Mark Your Calendars and Plan Ahead!

The 2020 Northeast Natural History Conference will be in Stamford CT, Friday April 17–Sunday April 19.

Let us know if you are interested in joining our Program Committee to help plan next year's event.

We also welcome proposals for field trips, workshops, and oral presentation sessions for 2020—contact us with your ideas!